

dear Ralph and Phuey,

please, rewrite or
retype the following

3 pages on TTC stationery

and with Ralph's cover letter

Send to Lydia by
special delivery, before
week end.

I authorize to write
my signature, which is
like this
Paula Nam

I am at Synapse (Synapse)
on Thursday and Friday
(Wed)

To N.Y.S.L.A

NAAL Im PA16
Expenditure T.V. Unit
Bygheden

Further development of Video synthesizer

— application of digital principle and Integrated circuits —

Computers and video are the two most powerful tools of today, said Gene Youngblood. Yet the full-fledged digital computer has not been used in any of the video synthesizers existing today (even the one at Computer Image Corporation). Therefore if we succeed in the fruitful interfacing of a digital computer and video synthesizer, its effect will be phenomenal.

Actually, I have done some computer research at Bell Labs as a Residential Visitor in 1967/68 under the guidance of Michael Noll. However I did not incorporate a digital computer into the design of the Palk-Abe Video Synthesizer at WGBH in 1969, because at that time most computers were not movable, and time-sharing (through telephone lines) made the output speed inadequate for on-line operation. However the rapidly advancing computer technology made the introduction of a digital computer into video art quite plausible and economically and artistically viable. Beauty Per Dollar Ratio will be much more favorable than the traditional ways of color video production.

This is not automation in the traditional sense, which is aimed at cutting the cost of personnel, while doing the same job. Our goal is rather the opposite. Digital computer video will open up a fresh new terrain with powerful programs which will awaken the latent desire for video art into the concrete and conscious level, and eventually increase the jobs for video artists, engineers and businessmen.

The beauty of any computer research is that one's effort will not and cannot be wasted. Computer science is so systematized that every effort of the predecessor, whether success or failure, will be compiled and used by the next comers. As a matter of fact, Boolean Algebra, the essentials of binary system, was invented more than 100 years ago, and it slept for 80 years before getting into service. The vast amount of rules and vocabulary of Machine Language is a 20th century Pyramid, which is created by the millions of stones, the toil of thousands of researchers. Since computerized video synthesizers have a vast virgin land before them, there will be

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little room for duplication with other artist-engineers. Eventually the form will mature and can be set up in many other video centers, now sprouting out like mushrooms.

(2)

Binghamton ~~Q~~ experimental TV center gives us favorable condition to succeed in this project, because

- a number 4*
- 1) it has access to ~~3~~ *4* qualified experimental engineers
 - 2) it has already accumulated considerable amount of hardware and know-hows in administration and application *of new machines.*
 - 3) it has very little bureaucratic complicity,
 - 4) The result will be immediately used by visiting artist at experimental TV center or ~~by SUNY students.~~
 - 5) I have no intention of monopolizing the fruit and I will ~~xx~~ liberate the machine to all video artists as soon as it has got built.
 - 6) It is also quite beneficial for the local video culture of Binghamton. Since Binghamton lacks the software resource of great city like *N*ew York or Boston, it has to rely more to electronic creation.